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Claims

1. Use of a composition comprising an extract of *Calotropis procera*, and at least one therapeutic compound and/or a physical treatment that exerts relevant, detrimental side effects on normal, non-cancer related cells, tissues or organs for the preparation of a medicament for treating cancer.
2. Use of a composition according to claim 1, wherein said extract is obtained using an extraction procedure, comprising the steps of:
 - a) extracting the starting material of said *Calotropis procera* plant, said starting material being selected among fruits, aerial parts subterranean parts, and their mixtures, in an aliphatic alcohol, by dissolving the starting material in said alcohol thereby obtaining a suspension of said material in said alcohol, stirring said suspension, and filtering said suspension by fritted glass thereby obtaining a first filtrate and a first solid part;
 - b) extracting said first solid part in an aliphatic alcohol thereby obtaining a second filtrate and a second solid part;
 - c) combining said first and said second filtrate thereby obtaining a combined filtrate, and evaporating said combined filtrate under vacuum thereby obtaining said extract.
3. Use of a composition according to claim 1 or 2, where said extract comprises at least two active compounds selected from the group comprising asclepin, calactin, vorusharin, calotropin, calotropagenin, uzarigenin, calotoxin, usharin, usharidin, and 2"oxo-vorusharin.
4. Use of a composition according to any of claims 1 to 3, wherein the weight ratio of extract: therapeutic compound is in the range 0.001 : 1 to 1000 : 1.
5. Use of a composition according to any of claims 1 to 4, wherein said cancer is selected from the group comprising breast cancer, lymphoma, sarcoma,

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pancreatic cancer, melanoma, colorectal cancer, glioma, non small cell lung cancer, small cell lung cancer, skin cancer, bone cancer, ovarian cancer, CNS cancer, renal cancer, bladder cancer, head and neck cancer, prostate cancer, liver cancer, hematological cancers.

6. Use of a composition according to any of claims 1 to 5, wherein said therapeutic compound(s) is an anti-cancer agent.
7. Use of a composition according to any of claims 1 to 6, wherein said therapeutic compound is selected from the group comprising adriamycin, alkeran, ara-c, bleomycin, biCNU, busulfan, CCNU, carboplatinum, cisplatinum, cyclophosphamide, cytoxan, daunorubicin, DTIC, 5-FU, fludarabine, gemcitabine (gemzar), herceptin, hexamethylmelamine, hydrea, idarubicin, ifosfamide, irinotecan (camptosar, CPT-11), leustatin, methotrexate, mithramycin, mitomycin, mitoxantrone, muphoran, navelbine, nitrogen mustard, oxaliplatin, rituxan, STI-571, streptozocine, taxol, taxotere, topotecan (hycamtin), velban, vincristine, VP-16, xeloda (capecitabine), or zevelin.
8. Use of a composition according to any of claims 1 to 6, wherein said therapeutic compound(s) is a cytotoxic antibody or a fragment thereof.
9. Use of a composition according to any of claims 1 to 6, wherein said therapeutic compound(s) is a cytotoxic hormone or a fragment thereof.
10. Use of a composition according to any of claims 1 to 6, wherein said therapeutic compound(s) is a cytotoxic peptide or a fragment thereof.
11. Use of a composition according to any of claims 1 to 5, wherein said therapeutic compound(s) is therapeutic radiation.

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12. Use of a composition according to any of claims 1 to 11, wherein said extract is administered prior to, after, or at the same time as said therapeutic compound(s).
13. An extraction process for obtaining an extract having biologically active components comprising the steps of:
 - a) extracting the starting material of said *Calotropis procera* plant, said starting material being selected among fruits, aerial parts, subterranean parts, and their mixtures, in an aliphatic alcohol, by dissolving the starting material in said alcohol thereby obtaining a suspension of said material in said alcohol, stirring said suspension; and filtering said suspension by fritted glass thereby obtaining a first filtrate and a first solid part;
 - b) extracting said first solid part in an aliphatic alcohol thereby obtaining a second filtrate and a second solid part;
 - c) combining said first and said second filtrate thereby obtaining a combined filtrate; and
 - d) evaporating said combined filtrate under vacuum thereby obtaining said extract.
14. Active extract isolated from the process according to claim 13.
15. A method for treating cancer comprising administering to an individual in need of such treatment a pharmaceutical composition as defined in any of claims 1 to 12.
16. A kit comprising a container in which an extract of *Calotropis procera* as defined in any of claims 1 to 12 is present, and a container in which a therapeutic compound is present.